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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/295,830	04/21/1999	HANS HEINLE	1-21294	7634

4859 7590 04/29/2004

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EXAMINER

VANAMAN, FRANK BENNETT

ART UNIT	PAPER NUMBER
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3618

DATE MAILED: 04/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/295,830

Applicant(s)

HEINLE ET AL.

Examiner

Frank Vanaman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 43-51 is/are pending in the application.
- 4a) Of the above claim(s) 49-51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 43-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/21/99 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Status of Application

1. Applicant's amendment, filed 1/22/04 has been entered in the application. Claims 1-42 are all now canceled, claims 43-51 are added and pending.

Election by Original Presentation

2. Newly submitted claims 49-51 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: these claims are directed to a method of heat exchanger assembly, separately classified in class 29, subclass 890.03.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 49-51 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the air permeable plate, and a chamber formed solely by a plurality of radiators, condenser and the support, and a chamber formed solely by a plurality of radiators, air-permeable plate, condenser and the support must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. Claims 45 and 48 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. These claims are directed to the subject matter wherein the chamber is completely defined by the support, condenser, and the

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plurality of radiators. This is contradictory to applicant's specification and drawings as originally filed. Note elements 1, 3a, 3b, 5a, 5b, which are not any of the support, condenser radiators or (as regards claim 46) an air permeable plate, yet are employed to define the chamber as set forth in applicant's specification on page 4.

5. Claim 46 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 46 refers to an air permeable plate, having a resistance that 'corresponds to' a resistance of a fourth radiator. It is not entirely clear what particular relationship is intended by "corresponds", further it is not clear if the claim recitation does or does not include a fourth radiator, if the claim includes a fourth radiator, its relationship to the remaining recited elements is not clear, if the claim does not include a fourth radiator, it is not clear whether or not the characteristics of an unrecited element are required to define applicants' invention.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 43 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liebherr-Werk (DE 295 04 867). Liebherr-Werk teaches a radiator arrangement for a vehicle including three radiator elements (11, 12, 13) and at least one condenser (note figures 4 and 5, support 9 supporting both a radiator and a condenser—"wasserkühler und kondensator") defining plural sides of a chamber, first (4) and second (18) air permeable plate elements, a fan (6) supported outside of the first plate (4) and thus on an exterior of the chamber defined by the radiators, support and plate, further including a plurality of upstanding support elements (7, 8). As regards claim 43, the reference to Liebherr-Werk fails to teach the provision of a fourth radiator. The duplication of parts already taught by the prior art to enhance the effect already taught by such parts is not deemed to be beyond the skill of the ordinary practitioner, and as such, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a further radiator comparable to those already taught by Liebherr-Werk, for the purpose of providing cooling to one further system. As regards claim 46,

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the reference to Liebherr-Werk fails to teach the air flow resistance of the plate (4) as "corresponding" to that of a fourth radiator, however it is very old and well known to adjust the rate of air flow through a passage or element by adjusting the opening through which the air may pass, and as such, it would have been obvious to one of ordinary skill in the art at the time of the invention to adjust the flow-through characteristics of the plate (4) so that it corresponds to that of a radiator, to the breadth claimed, for the purpose of adjusting the degree of air flow through the entire system.

8. Claims 44 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liebherr-Werk in view of Cambeis (DE 24 065, cited previously). The reference to Liebherr-Werk is discussed above and fails to teach, at least one radiator being pivotally connected to provide access. Cambeis teaches a vehicle wherein a radiator (3) is provided with a swivel or pivot mount (5) in order to allow access to a further component. It would have been obvious to one of ordinary skill in the art at the time of the invention to make at least one radiator of the arrangement of Liebherr-Werk pivotally mounted as taught by Cambeis for the purpose of providing access to the inside of the chamber.

Claims not Rejected over the Prior Art

9. Claims 45 and 48 are not rejected as being anticipated by or obvious over the prior art of record, however they are not in condition for allowance in view of the rejections set forth above under 35 USC §112, first paragraph.

Response to Comments

10. Applicant's comments have been carefully considered. As regards the application under 35 USC §102 of the reference to Liebherr-Werk, the examiner agrees that the new claims as recited are not anticipated by the reference, note however the rejections under 35 USC §103.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to F. Vanaman whose telephone number is 703-308-0424. Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is 703-308-1113.


As of May 1, 2003, any response to this action should be mailed to:

Mail Stop _____
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450,

Or faxed to one of the following fax servers:

Regular Communications/Amendments: 703-872-9326
After Final Amendments: 703-872-9327
Customer Service Communications: 703-872-9325

F. VANAMAN
Primary Examiner
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Handwritten signature of F. Vanaman, dated 7/26/04.